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PATENT
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patentees: Katsumi Tahara et al.

Application to Reissue Patent No.: 5,715,009

Issued : February 3, 1998

: PICTURE SIGNAL TRANSMITTING METHOD AND APPARATUS

DECLARATION OF KATSUMI TAHARA and HIROMI YOSHINARI

As a below-named inventor, I hereby declare that:

1. My residence, post office address and citizenship are as stated below next to my name.

2. I verily believe myself to be the original, first inventor of the invention described and claimed in Letters Patent No. 5,715,009 and in the specification filed herewith for which I solicit a patent.

3. I hereby state that I have reviewed and understand the contents of the aforementioned specification, including the claims.

4. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

5. I hereby claim foreign priority benefits under Title 35, United States Code § 119 of Application Number 06-130651 filed in Japan on June 13, 1994 and state that no other application for patent or inventor's certificate or any PCT

international application was filed by me on the same subject matter prior to June 13, 1994.

6. I do not know and do not believe that the invention was ever known or used in the United States of America before my invention thereof.

7. I verily believe the original Letters Patent to be wholly or partly inoperative or invalid by reason of my claiming more or less than I had a right to claim in the patent by at least failing to claim the following:

A. An encoding apparatus for encoding source video data which had previously been encoded at a previous encoding process and had previously been decoded at a previous decoding process, said apparatus comprising means for receiving said source video data; means for extracting coding information from said source video data, wherein said coding information relates to a coding operation of said previous encoding process; and means for encoding said source video data in accordance with said coding information.

B. An encoding method for encoding source video data which had previously been encoded at a previous encoding process and had previously been decoded at a previous decoding process, the method comprising the steps of receiving said source video data; extracting coding information from said source video data, wherein said coding information relates to a coding operation of

said previous encoding process; and encoding said source video data in accordance with said coding information.

C. An encoding apparatus for encoding source video data, said apparatus comprising means for receiving said source video data, wherein said source video data had previously been encoded at a previous encoding process, and for receiving coding information relating to a coding operation of said previous encoding process; and means for encoding said source video data in accordance with said coding information.

D. An encoding method for encoding source video data, the method comprising the steps of receiving said source video data, wherein said source video data had previously been encoded at a previous encoding process, and for receiving coding information relating to a coding operation of said previous encoding process; and encoding said source video data in accordance with said coding information.

E. An encoding apparatus for encoding source video data, said apparatus comprising means for receiving a plurality of pictures within said source video data, wherein said plurality of pictures had previously been encoded at a previous encoding process; means for receiving picture coding type indicating which of I-picture, P-picture or B-picture had been associated with said previous encoding process; and means for encoding each of said pictures so that each picture is encoded by using the same

picture coding type as said picture coding type of said previous encoding process.

F. An encoding method for encoding source video data, the method comprising the steps of receiving a plurality of pictures within said source video data, wherein said plurality of pictures had previously been encoded at a previous encoding process; receiving picture coding type indicating which of I-picture, P-picture or B-picture had been associated with said previous encoding process; and encoding each of said pictures so that each picture is encoded by using the same picture coding type as said picture coding type of said previous encoding process.

G. A decoding apparatus for decoding an encoded bit stream which had been encoded at a previous encoding process, said apparatus comprising means for decoding said encoded bit stream to generate decoded video data in accordance with coding information relating to a coding operation of said previous encoding process; means for multiplexing said decoded video data and said coding information to generate multiplexed data; and means for transmitting said multiplexed data so that said coding information will be used in a later encoding process.

H. A decoding method for decoding an encoded bit stream which had been encoded at a previous encoding process, the method comprising the steps of decoding said encoded bit stream to generate decoded video data in accordance with coding

information relating to a coding operation of said previous encoding process; multiplexing said decoded video data and said coding information to generate multiplexed data; and transmitting said multiplexed data so that said coding information will be used in a later encoding process.

I. A decoding apparatus for decoding an encoded bit stream which had been encoded at a previous encoding process, said apparatus comprising means for decoding said encoded bit stream to generate decoded video data; means for multiplexing said decoded video data and coding information relating to a coding operation of said previous encoding process; and means for transmitting the multiplexed data so that said coding information will be used in a later encoding process.

J. A decoding method for decoding an encoded bit stream which had been encoded at a previous encoding process, the method comprising the steps of decoding said encoded bit stream to generate decoded video data; multiplexing said decoded video data and coding information relating to a coding operation of said previous encoding process; and transmitting the multiplexed data so that said coding information will be used in a later encoding process.

K. A decoding apparatus for decoding an encoded bit stream which had been encoded at a previous encoding process, said apparatus comprising means for extracting coding information from said encoded bit stream, wherein said coding information

relates to a coding operation of said previous encoding process; means for decoding said encoded bit stream to generate decoded video data in accordance with said coding information; and means for transmitting said decoded video data and said coding information so that said coding information will be used in a later encoding process for said decoded video data.

L. A decoding method for decoding an encoded bit stream which had been encoded at a previous encoding process, the method comprising the steps of extracting coding information from said encoded bit stream, wherein said coding information relates to a coding operation of said previous encoding process; decoding said encoded bit stream to generate decoded video data in accordance with said coding information; and transmitting said decoded video data and said coding information so that said coding information will be used in a later encoding process for said decoded video data.

M. A decoding apparatus for decoding an encoded bit stream which had been encoded at a previous encoding process, said apparatus comprising means for extracting coding information from said encoded bit stream, wherein said coding information relates to a coding operation of said previous encoding process; means for decoding said encoded bit stream to generate decoded video data; and means for transmitting the decoded video data and said coding information so that said coding information will be used in a later encoding process for said decoded video data.

N. A decoding method for decoding an encoded bit stream which had been encoded at a previous encoding process, the method comprising the steps of extracting coding information from said encoded bit stream, wherein said coding information relates to a coding operation of said previous encoding process; decoding said encoded bit stream to generate decoded video data; and transmitting the decoded video data and said coding information so that said coding information will be used in a later encoding process for said decoded video data.

O. A decoding apparatus for decoding an encoded bit stream which had been encoded at a previous encoding process, said apparatus comprising means for extracting picture coding type from said encoded bit stream, wherein said picture coding type indicates which of I-picture, P-picture, or B-Picture had been associated with said previous encoding process; means for decoding each picture within said encoded bit stream to generate decoded video data; and means for transmitting said decoded video data and said picture coding type so that each said picture will be encoded by using the same picture coding type as said picture coding type in a later encoding process for said decoded video data.

P. A decoding method for decoding an encoded bit stream which had been encoded at a previous encoding process, the method comprising the steps of extracting picture coding type from said encoded bit stream, wherein said picture coding type

indicates which of I-picture, P-picture, or B-Picture had been associated with said previous encoding process; decoding each picture within said encoded bit stream to generate decoded video data; and transmitting said decoded video data and said picture coding type so that each said picture will be encoded by using the same picture coding type as said picture coding type in a later encoding process for said decoded video data.

Q. A coding system for performing a decoding process and an encoding process to an encoded bit stream which had been encoded at a previous encoding process, the system comprising decoding means for decoding said encoded bit stream to generate decoded video data, and for outputting coding information relating to a coding operation of said previous encoding process; and encoding means for encoding said decoded video data based on said coding information transmitted from said decoding means.

R. A coding method for performing a decoding process and an encoding process to an encoded bit stream which had been encoded at a previous encoding process, the method comprising the steps of decoding said encoded bit stream by use of a decoder to generate decoded video data and outputting coding information relating to a coding operation of said previous encoding process; and encoding said decoded video data based on said coding information transmitted from said decoder.

S. A coding system for performing a decoding process and an encoding process to an encoded bit stream which had been

encoded at a previous encoding process, the system comprising decoding means for decoding said encoded bit stream to generate decoded video data; encoding means for encoding said decoded video data; and means for controlling a coding operation of said encoding means in accordance with coding information relating to a coding operation of said previous encoding process.

T. A coding method for performing a decoding process and an encoding process to an encoded bit stream which had been encoded at a previous encoding process, the method comprising the steps of decoding said encoded bit stream to generate decoded video data; encoding said decoded video data by use of an encoder; and controlling a coding operation of said encoder in accordance with coding information relating to a coding operation of said previous encoding process.

8. I did not discover that the claims of the original patent claimed more or less than I had a right to claim until after the original patent was issued.

9. No claims were previously presented during prosecution of the above referenced issued patent that particularly claimed the methods and apparatuses described in paragraph 7.

10. The error(s) noted above, as well as any other errors to be corrected herein, arose without any deceptive intention on my part.

11. New claims 28-47 submitted with this application particularly point out subject matter which I considered my invention and round out the scope of protection to which I am entitled. By the omission of such claims the original patent claims less than I had a right to claim.

I hereby appoint William S. Frommer, Registration No. 25,506, and Dennis M. Smid, Registration No. 34,930, of Frommer Lawrence & Haug LLP or their duly appointed associate, my attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to file continuation and divisional applications thereof, to receive the Patent, and to transact all business in the Patent and Trademark Office and in the Courts in connection therewith, and specify that all communications about the application are to be directed to the following address:

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Direct all telephone calls to: (212) 588-0800 to the attention of William S. Frommer, Esq.

Wherefore I pray that I may be allowed to surrender the Letters Patent No. 5,715,009 granted February 3, 1998, whereof Sony Corporation, on whose behalf and with whose assent this application is made, is the sole owner, by Assignment, and that Letters Patent may be reissued to Sony Corporation for the same invention upon the attached specification.

I, the undersigned applicant, further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Katsumi Tahara — Feb. 23/ 2000
Katsumi Tahara — Date

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